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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/634,369

08/06/2003

Paul S. Thompson

2924

32104

7590

11/30/2005

PAUL THOMPSON

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EXAMINER

ALI, SHUMAYA B

ART UNIT

PAPER NUMBER

3743

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/634,369

Applicant(s)

THOMPSON, PAUL S.

Examiner

Shumaya B. Ali

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,10,11 and 15-19 is/are rejected.
- 7) ☐ Claim(s) 2,6-9 and 12-15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>detailed action</u> .                  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claim 1 recites the limitation “**the midpoint**” in line 11. There is insufficient antecedent basis for this limitation in the claim.
3. Claims 16-19 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: **claimed limitations are not recognized due to improper formatting.**

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:  
  
A person shall be entitled to a patent unless –  
  
(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

**Claims 4,10 are rejected under 35 U.S.C. 102(a) as being anticipated by Wood US Patent Application No. 20020092527 A1**

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**As to claim 4, Wood discloses** in figures 1-6 a nasal cannula assembly 10 with a hollow tubular member (24) having a central portion (26) of sufficient length to span the width of an average patient's nostrils and end portions with openings (see fig.2B, opening on either side of 24) of a diameter to receive support tubing, a pair of spaced hollow extensions (22d) communicating with the interior of said tubular member and extending away from the member for directing fluid into the nostrils of the patient and/or receiving gas or pressure variations from the nostrils of the patient, flexible support tube (18) fitted to open end of each said end portion.

**As to claim 10, Wood discloses** in figures 1-6 a nasal cannula assembly 10 with a hollow tubular member (24) having an opening at each end (see fig.2B), said tubular member having a central portion (26) of sufficient length to span the width of an average patient's nostrils and end portion extending from each end of said central portion, said central portion having a pair of spaced, hollow extensions (22d) integral with and projecting therefrom said extensions terminating in gas directing orifices (36) and which hollow portion of said extensions communicate with said hollow main body portion, a pair of spaced hollow extensions (space interior to 30) communicating with the interior of said tubular member and extending away from the member for directing fluid into the nostrils of the patient and/or receiving gas or pressure variation form the nostrils of the patient; open end of each said end portion accepting support tubes (18); each said support tubes having an opposite open end affixed to a common coupling (20) with hollow interior communicating with both said support tubes, said coupling having a third opening communicating with said hollow interior and accepting open end of a flexible main supply tube (see fig.2).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1,3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wood US Patent Application No. 20020092527 A1.**

As to claim 1, Wood discloses in figures 1-6 a nasal cannula assembly (10) comprising a hollow tubular member (24) having an opening at each end (fig.2B), said tubular member having a central portion (28) of sufficient length to span the width of an average patient's nostrils and end portions extending from each end of said central portion, said central portion having a pair of spaced, hollow extensions terminating in gas directing orifices (36) and which hollow portion of said extensions communicate with said hollow main body portion, said central portion lying in a first plane (fig.2B, bottom surface of 24, where the top surface considered to include 28,30, and 36) with longitudinal axes (axes through 26) symmetrical about the midpoint and forming an angle in said first plane less than 180 degrees (fig.2B seem to depict an angle less than 180 is created by the longitudinal axes through 26 and the base of 28); each said hollow extension having a longitudinal axis projecting from said central portion at an acute angle from said first

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plane, said gas directing orifices of said hollow extensions having a longitudinal axis lying in a second plane essentially parallel to and displaced from said first plane, said end portions of said central portion lying in essentially the first plane with longitudinal axis of said end portion essentially collinear with longitudinal axis of corresponding symmetrical half of said central portion (see fig.2B).

**As to claim 3, Wood's** figure 2B seems to depict wherein longitudinal axis of each said gas directing orifice angled acutely (taper) in said second plane toward second said gas directing orifice (see also col.6 lines 22-27)

**Claims 5,11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wood US**

**Patent Application No. 2002/0092527 A1 in view of Gunaratnam et al. US Patent**

**Application Publication 2004/0226566**

**As to claim 5, Wood** discloses all limitations as recited in claim 4, however does not disclose the support tubes having a hardness between 40 and 75 Shore A, however Gunaratnam et al. teaches flexible tubing with Shore A hardness between 50-60 (see 0304). Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to modify the cannula assembly of Wood in view of Gunaratnam et al. since Gunaratnam et al. teaches such hardness facilitates swiveling movement of the tube (see 0304).

**as to claim 11, Wood** discloses all limitations as recited in claim 10, however does not disclose the support tubes having a hardness between 40 and 75 Shore A, however Gunaratnam et al. teaches flexible tubing with Shore A hardness between 50-60 (see 0304). Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made

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to modify the cannular assembly of Wood in view of Gunaratnam et al. since Gunaratnam et al. teaches such hardness facilitates swiveling movement of the tube (see 0304).

***Allowable Subject Matter***

6. Claims 2,6-9,12-15 are allowed.

***Specification***

7. The claims are objected to because the lines are crowded too closely together, making reading difficult. Substitute claims with lines one and one-half or double spaced on good quality paper are required. See 37 CFR 1.52(b).

8. The spacing of the lines of the specification is such as to make reading difficult. New application papers with lines 1½ or double spaced on good quality paper are required.

***Claim Objections***


Claim 10 is objected to because of the following informalities: claim 10, it is vague whether the limitation “a pair of spaced hollow extensions communicating with the interior of said tubular member” is referring back to recitation “a pair of spaced hollow extensions integral with and projecting therefrom”. Appropriate correction is required.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shumaya B. Ali whose telephone number is 571-272-6088. The examiner can normally be reached on M-F 8:30-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennett can be reached on 571-272-4791. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Shumaya B Ali 11/28/05  
Examiner  
Art Unit 3743

  
Henry Bennett  
Supervisory Patent Examiner  
Group 3700